UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/696,502	10/29/2003	John S. Csapo	2003.10.004.WS0	2003.10.004.WS0 5747	
23990 DOCKET CLE	7590 11/06/2007		EXAM	EXAMINER	
P.O. DRAWER 800889			SANTIAGO CORDE	SANTIAGO CORDERO, MARIVELISSE	
DALLAS, TX	LLAS, TX 75380		ART UNIT	PAPER NUMBER	
			2617		
-					
			MAIL DATE	DELIVERY MODE	
			11/06/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
Office Action Commons	10/696,502	CSAPO ET AL.			
Office Action Summary	Examiner	Art Unit			
	Marivelisse Santiago-Cordero	2617			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	l. ely filed the mailing date of this communication. (35 U.S.C. § 133).			
Status					
1)⊠ Responsive to communication(s) filed on <u>04 Occ.</u> 2a)⊠ This action is <b>FINAL</b> . 2b)□ This     3)□ Since this application is in condition for alloward closed in accordance with the practice under Expression is the practice of the practice.	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4) ⊠ Claim(s) 1-3,5-8,10-12 and 14-19 is/are pending 4a) Of the above claim(s) is/are withdraw 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-3,5-8,10-12 and 14-19 is/are rejected 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or	vn from consideration.				
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the examine Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine	epted or b) objected to by the Eddrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ite			

## **DETAILED ACTION**

## Response to Arguments

1. Applicant's arguments filed on 10/7/07 have been fully considered but they are not persuasive.

Applicant argues that Jolma describes a system that performs a hard handoff of the MS from BTS11 to BTS21 not while the MS remains solely within a shared coverage area of BTS11 and BTS21, but after the MS has moved into a coverage area of a third base transceiver station (Remarks: page 9, last paragraph). In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., while the MS remains solely within a shared coverage area) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The claims state "the hard handoff region a portion of the second wireless network and solely within a shared coverage region of the transition base transceiver station and the second base transceiver station". Nowhere in the claims the MS remains solely within a shared coverage area, as argued.

Further, Soliman does disclose "the hard handoff region a portion of the second wireless network and solely within a shared coverage region of the transition base transceiver station and the second base transceiver station" (Fig. 3, references 90, 92; paragraphs [0048], [0057]).

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 3, 5-8, 10-12, and 14-19 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 1, 6, and 11, the limitation "and solely within a shared coverage region of the transition base transceiver station and the second base transceiver station" is not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. After reviewing the original specification, the Examiner did not find support for the above limitation. Applicant is welcomed to point out where in the specification the Examiner can find support for this limitation, if Applicant believes otherwise.

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-3, 5-8, 10-12, and 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jolma (Patent No.: 6,011,971; cited in form PTO-892, paper no. 20061031) in view of Soliman (Pub. No.: US 2003/0034947).

Regarding claim 1, Jolma discloses for use in a first wireless network, a border base station capable of providing reliable hard handoffs between the first wireless network and a second wireless network, the border base station comprising:

a base station controller (Fig. 4, reference BSC1) operable to manage communications resources within the first wireless network (Fig. 4; note the network encompassed by BSC1 and its respective base transceiver stations and respective coverage areas);

a first base transceiver station (Fig. 4, reference BTS12) coupled to the base station controller (Fig. 4), the first base transceiver station operable to provide communication for a mobile station in the first wireless network (Fig. 4); and

a transition base transceiver station (Fig. 4, reference BTS11) coupled to the base station controller (Fig. 4) and located in proximity to a second base transceiver station (Fig. 4, reference BTS21), the transition base transceiver station operable to provide communication for the mobile station in the second wireless network (Fig. 4; note the network encompassed by BSC2 and its respective base transceiver stations and respective coverage areas), the second base transceiver station part of the second wireless network (Fig. 4; note the network encompassed by BSC2 and its respective base transceiver stations and respective coverage areas) and operable to provide communication for the mobile station in the second wireless network (Fig. 4),

wherein the base station controller is further operable to perform a hard handoff for the mobile station between the transition base transceiver station and the second base transceiver station (col. 5, lines 25-30 and 50-51); and

wherein the base station controller is further operable to perform the hard handoff for the mobile station between the transition base transceiver station and the second base transceiver station when a hard handoff threshold has been exceeded (col. 6, lines 53-57).

Jolma fails to specifically disclose to perform the hard handoff when the mobile station has reached a hard handoff region, the hard handoff region a portion of the second wireless network and solely within a shared coverage region of the transition base transceiver station and the second base transceiver station.

However, Jolma does suggest these limitations. Note that Jolma performs a hard handoff between overlapping stations BTS11 and BTS 21 (Fig. 4; col. 5, lines 35-39 and 49-53). It is an inherent feature, and/or an obvious expedient thereof, that to perform a successful hard handoff for a mobile station between two base transceiver stations in different networks, such mobile station must reach a hard handoff region. Once it is determined that the mobile station is in a hard handoff region, the base station controller decides, among other things, whether the hard handoff should occur, to which base station, and/or when it should occur. Accordingly, since Jolma does teach BTS11 and BTS21 in overlapping arrangement and successfully performing the hard handoff between these stations (Fig. 4; col. 5, lines 35-39 and 49-53), the mobile station must have reached a hard handoff region, the hard handoff region a portion of the second wireless network.

Art Unit: 2617

Nevertheless, in the same field of endeavor, Soliman discloses to perform the hard handoff when the mobile station has reached a hard handoff region (Fig. 3, references 90, 92; paragraphs [0048], [0057]), the hard handoff region a portion of the second wireless network (Fig. 3, reference 86) and solely within a shared coverage region of the transition base transceiver station and the second base transceiver station (Fig. 3, references 90, 92; paragraphs [0048], [0057]).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to perform the hard handoff of Jolma when the mobile station has reached a hard handoff region, the hard handoff region a portion of the second wireless network and solely within a shared coverage region of the transition base transceiver station and the second base transceiver station as suggested by Soliman for the advantages of efficiently triggering hard handoff (Soliman: paragraph [0012]) and for successfully performing the handoff.

Regarding claim 2, in the obvious combination, Johna discloses the base station controller further operable to perform a soft handoff for the mobile station between the first base transceiver station and the transition base transceiver station (col. 5, lines 39-41).

Regarding claim 3, in the obvious combination, Jolma discloses the base station controller operable to perform the soft handoff for the mobile station between the first base transceiver station and the transition base transceiver station when the mobile station reaches an overlap region between the first wireless network and the second wireless network (Fig. 4; col. 5, lines 33-41).

Regarding claim 5, in the obvious combination, Jolma fails to specifically disclose the first base transceiver station operable to provide communication for the mobile station in the first

wireless network at a first carrier frequency, the transition base transceiver station operable to provide communication for the mobile station in the second wireless network at the first carrier frequency, and the second base transceiver station operable to provide communication for the mobile station in the second wireless network at a second carrier frequency.

However, Jolma does suggests the first base transceiver station operable to provide communication for the mobile station in the first wireless network at a first carrier frequency and the transition base transceiver station operable to provide communication for the mobile station in the second wireless network at the first carrier frequency, since Jolma discloses that a soft handoff occurs between the first base transceiver station and the transition base transceiver station (col. 5, lines 39-41). It was notoriously well known in the art at the time of invention by applicant that soft handoff occurs between the same frequencies. Consequently, if Jolma discloses a soft handoff between the first base transceiver station and the transition base transceiver station, then, Jolma does suggests that they both operate at the same frequency, i.e., at a first carrier frequency as claimed.

In addition, Jolma suggests the second base transceiver station operable to provide communication for the mobile station in the second wireless network at a second carrier frequency, since Jolma discloses that a hard handoff occurs between the transition base transceiver station and the second base transceiver station (col. 5, lines 50-51). It was notoriously well known in the art at the time of invention by applicant that hard handoff occurs between different frequencies. Consequently, if Jolma discloses a hard handoff between the transition base transceiver station and the second base transceiver station, and, as stated above,

Art Unit: 2617

the transition base transceiver station operates at the first carrier frequency, then, Johna does suggests that second base transceiver station operates at a second carrier frequency as claimed.

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to operate the first transceiver station and the transition base transceiver station at a first carrier frequency and the second transceiver station at a second carrier frequency as suggested by Jolma because for the advantages of performing soft and hard handoffs as appropriate and guaranteeing the continuity of a call.

Nevertheless, Soliman discloses the first base transceiver station (Fig. 3, station (not shown, but inherent (see paragraph [0006])) covering cell 1) operable to provide communication for the mobile station in the first wireless network (Fig. 3, reference 84) at a first carrier frequency (Fig. 3, reference  $f_1$  in cell 1), the transition base transceiver station (Fig. 3, station (not shown, but inherent (see paragraph [0006])) covering cell 2) operable to provide communication for the mobile station in the second wireless network at the first carrier frequency (Fig. 3, reference  $f_1$  in cell 2), and the second base transceiver station (Fig. 3, station (not shown, but inherent (see paragraph [0006])) covering cell 3) operable to provide communication for the mobile station in the second wireless network at a second carrier frequency (Fig. 3, reference  $f_2$  in cell 3).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to operate the first transceiver station and the transition base transceiver station at a first carrier frequency and the second transceiver station at a second carrier frequency as suggested by Soliman for the advantages of performing soft and hard handoffs as appropriate and guaranteeing the continuity of a call (paragraph [0059]).

Regarding claim 6, Jolma discloses a first wireless network comprising a plurality of border base stations, each one of the border base stations capable of providing reliable hard handoffs between the first wireless network and a second wireless network, each border base station comprising:

a base station controller (Fig. 4, reference BSC1) operable to manage communications resources within the first wireless network (Fig. 4; note the network encompassed by BSC1 and its respective base transceiver stations and respective coverage areas);

a first base transceiver station coupled to the base station controller (Fig. 4, reference BTS12), the first base transceiver station operable to provide communication for a mobile station in the first wireless network (Fig. 4); and

a transition base transceiver station (Fig. 4, reference BTS11) coupled to the base station controller (Fig. 4) and located in proximity to a second base transceiver station (Fig. 4, reference BTS21), the transition base transceiver station operable to provide communication for the mobile station in the second wireless network (Fig. 4; note the network encompassed by BSC2 and its respective base transceiver stations and respective coverage areas), the second base transceiver station part of the second wireless network (Fig. 4) and operable to provide communication for the mobile station in the second wireless network (Fig. 4),

wherein the base station controller is further operable to perform a hard handoff for the mobile station between the transition base transceiver station and the second base transceiver station (col. 5, lines 25-30 and 50-51); and

Art Unit: 2617

wherein the base station controller operable to perform the hard handoff for the mobile station between the transition base transceiver station and the second base transceiver station when a hard handoff threshold has been exceeded (col. 6, lines 53-57).

Jolma fails to specifically disclose to perform the hard handoff when the mobile station has reached a hard handoff region, the hard handoff region a portion of the second wireless network and solely within a shared coverage region of the transition base transceiver station and the second base transceiver station.

However, Jolma does suggest these limitations. Note that Jolma performs a hard handoff between overlapping stations BTS11 and BTS 21 (Fig. 4; col. 5, lines 35-39 and 49-53). It is an inherent feature, and/or an obvious expedient thereof, that to perform a successful hard handoff for a mobile station between two base transceiver stations in different networks, such mobile station must reach a hard handoff region. Once it is determined that the mobile station is in a hard handoff region, the base station controller decides, among other things, whether the hard handoff should occur, to which base station, and/or when it should occur. Accordingly, since Jolma does teach BTS11 and BTS21 in overlapping arrangement and successfully performing the hard handoff between these stations (Fig. 4; col. 5, lines 35-39 and 49-53), the mobile station must have reached a hard handoff region, the hard handoff region a portion of the second wireless network.

Nevertheless, in the same field of endeavor, Soliman discloses to perform the hard handoff when the mobile station has reached a hard handoff region (Fig. 3, references 90, 92; paragraphs [0048], [0057]), the hard handoff region a portion of the second wireless network (Fig. 3, reference 86) and solely within a shared coverage region of the transition base

Art Unit: 2617

transceiver station and the second base transceiver station (Fig. 3, references 90, 92; paragraphs [0048], [0057]).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to perform the hard handoff of Jolma when the mobile station has reached a hard handoff region, the hard handoff region a portion of the second wireless network and solely within a shared coverage region of the transition base transceiver station and the second base transceiver station as suggested by Soliman for the advantages of efficiently triggering hard handoff (Soliman: paragraph [0012]) and for successfully performing the handoff.

Regarding claim 7, in the obvious combination, Jolma discloses the base station controller further operable to perform a soft handoff for the mobile station between the first base transceiver station and the transition base transceiver station (col. 5, lines 39-41).

Regarding claim 8, in the obvious combination, Jolma discloses the base station controller operable to perform the soft handoff for the mobile station between the first base transceiver station and the transition base transceiver station when the mobile station reaches an overlap region between the first wireless network and the second wireless network (Fig. 4; col. 5, lines 33-41).

Regarding claim 10, in the obvious combination, Jolma fails to specifically disclose the first base transceiver station operable to provide communication for the mobile station in the first wireless network at a first carrier frequency, the transition base transceiver station operable to provide communication for the mobile station in the second wireless network at the first carrier frequency, and the second base transceiver station operable to provide communication for the mobile station in the second wireless network at a second carrier frequency.

However, Jolma does suggests the first base transceiver station operable to provide communication for the mobile station in the first wireless network at a first carrier frequency and the transition base transceiver station operable to provide communication for the mobile station in the second wireless network at the first carrier frequency, since Jolma discloses that a soft handoff occurs between the first base transceiver station and the transition base transceiver station (col. 5, lines 39-41). It was notoriously well known in the art at the time of invention by applicant that soft handoff occurs between the same frequencies. Consequently, if Jolma discloses a soft handoff between the first base transceiver station and the transition base transceiver station, then, Jolma does suggests that they both operate at the same frequency, i.e., at a first carrier frequency as claimed.

In addition, Jolma suggests the second base transceiver station operable to provide communication for the mobile station in the second wireless network at a second carrier frequency, since Jolma discloses that a hard handoff occurs between the transition base transceiver station and the second base transceiver station (col. 5, lines 50-51). It was notoriously well known in the art at the time of invention by applicant that hard handoff occurs between different frequencies. Consequently, if Jolma discloses a hard handoff between the transition base transceiver station and the second base transceiver station, and, as stated above, the transition base transceiver station operates at the first carrier frequency, then, Jolma does suggests that second base transceiver station operates at a second carrier frequency as claimed.

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to operate the first transceiver station and the transition base transceiver station at a first carrier frequency and the second transceiver station at a second carrier frequency

Art Unit: 2617

as suggested by Jolma because for the advantages of performing soft and hard handoffs as appropriate and guaranteeing the continuity of a call.

Nevertheless, Soliman discloses the first base transceiver station (Fig. 3, station (not shown, but inherent (see paragraph [0006])) covering cell 1) operable to provide communication for the mobile station in the first wireless network (Fig. 3, reference 84) at a first carrier frequency (Fig. 3, reference  $f_1$  in cell 1), the transition base transceiver station (Fig. 3, station (not shown, but inherent (see paragraph [0006])) covering cell 2) operable to provide communication for the mobile station in the second wireless network at the first carrier frequency (Fig. 3, reference  $f_1$  in cell 2), and the second base transceiver station (Fig. 3, station (not shown, but inherent (see paragraph [0006])) covering cell 3) operable to provide communication for the mobile station in the second wireless network at a second carrier frequency (Fig. 3, reference  $f_2$  in cell 3).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to operate the first transceiver station and the transition base transceiver station at a first carrier frequency and the second transceiver station at a second carrier frequency as suggested by Soliman for the advantages of performing soft and hard handoffs as appropriate and guaranteeing the continuity of a call (paragraph [0059]).

Regarding claim 11, Jolma discloses for use in a border base station in a first wireless network, a method for providing reliable hard handoffs between the first wireless network and a second wireless network, the method comprising:

performing a soft handoff for a mobile station between a first base transceiver station (Fig. 4, reference BTS12) in the first wireless network (Fig. 4; note the network encompassed by

BSC1 and its respective base transceiver stations and respective coverage areas) and a transition base transceiver station (Fig. 4, reference BTS11) in the first wireless network (Fig. 4) (col. 5, lines 39-41); and

performing a hard handoff for the mobile station between the transition base transceiver station and a second base transceiver station (Fig. 4, reference BTS21) in the second wireless network (Fig. 4; note the network encompassed by BSC2 and its respective base transceiver stations and respective coverage areas) (col. 5, lines 50-51) when a hard handoff threshold has been exceeded (col. 6, lines 53-57), the transition base transceiver station located in proximity to the second base transceiver station (Fig. 4), without performing an intervening hard handoff between the first base transceiver station and the transition base transceiver station (Fig. 4; col. 5, lines 39-53).

Jolma fails to specifically disclose to perform the hard handoff when the mobile station has reached a hard handoff region, the hard handoff region a portion of the second wireless network and solely within a shared coverage region of the transition base transceiver station and the second base transceiver station.

However, Jolma does suggest these limitations. Note that Jolma performs a hard handoff between overlapping stations BTS11 and BTS 21 (Fig. 4; col. 5, lines 35-39 and 49-53). It is an inherent feature, and/or an obvious expedient thereof, that to perform a successful hard handoff for a mobile station between two base transceiver stations in different networks, such mobile station must reach a hard handoff region. Once it is determined that the mobile station is in a hard handoff region, the base station controller decides, among other things, whether the hard handoff should occur, to which base station, and/or when it should occur. Accordingly, since

Jolma does teach BTS11 and BTS21 in overlapping arrangement and successfully performing the hard handoff between these stations (Fig. 4; col. 5, lines 35-39 and 49-53), the mobile station must have reached a hard handoff region, the hard handoff region a portion of the second wireless network.

Nevertheless, in the same field of endeavor, Soliman discloses to perform the hard handoff when the mobile station has reached a hard handoff region (Fig. 3, references 90, 92; paragraphs [0048], [0057]), the hard handoff region a portion of the second wireless network (Fig. 3, reference 86) and solely within a shared coverage region of the transition base transceiver station and the second base transceiver station (Fig. 3, references 90, 92; paragraphs [0048], [0057]).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to perform the hard handoff of Jolma when the mobile station has reached a hard handoff region, the hard handoff region a portion of the second wireless network and solely within a shared coverage region of the transition base transceiver station and the second base transceiver station as suggested by Soliman for the advantages of efficiently triggering hard handoff (Soliman: paragraph [0012]) and for successfully performing the handoff.

Regarding claim 12, in the obvious combination, Jolma discloses performing the soft handoff for the mobile station comprising performing the soft handoff when the mobile station reaches an overlap region between the first wireless network and the second wireless network (Fig. 4; col. 5, lines 33-41).

Regarding claim 14, in the obvious combination, Jolma discloses performing the soft handoff between the first base transceiver station and the transition base transceiver station

comprising performing the soft handoff from the first base transceiver station to the transition base transceiver station (col. 5, lines 39-41), and performing the hard handoff between the transition base transceiver station and the second base transceiver station comprising performing the hard handoff from the transition base transceiver station to the second base transceiver station (col. 5, lines 50-51).

Regarding claim 15, in the obvious combination, Jolma fails to specifically disclose performing the soft handoff between the first base transceiver station and the transition base transceiver station comprising performing the soft handoff from the transition base transceiver station to the first base transceiver station, and performing the hard handoff between the transition base transceiver station and the second base transceiver station comprising performing the hard handoff from the second base transceiver station to the transition base transceiver station.

However, it was notoriously well known in the art at the time of invention by applicant that mobile stations may be in constant movement and may return through the same path to the originating point (system).

Therefore, it would have been obvious to one of ordinary skill in this art at the time the invention was made to perform the soft handoff between the first base transceiver station and the transition base transceiver station comprising performing the soft handoff from the transition base transceiver station to the first base transceiver station of Jolma, and performing the hard handoff between the transition base transceiver station and the second base transceiver station comprising performing the hard handoff from the second base transceiver station to the transition base transceiver station of Jolma because the mobile station may be in constant movement; consequently, returning through the same path to the originating system.

Regarding claim 16, in the obvious combination, Jolma discloses further comprising: providing communication for the mobile station at a first carrier frequency in the first wireless network (Fig. 4; note that it is inherent that communication is provided at a first carrier frequency in the wireless network), but fail to specifically disclose providing communication for the mobile station at the first carrier frequency and at a second carrier frequency in the second wireless network.

However, Jolma does suggests further comprising: providing communication for the mobile station at the first carrier frequency and at a second carrier frequency in the second wireless network (Fig. 4; col. 5, lines 33-53; note that the second network is encompassed by BSC2 and its respective base transceiver stations and respective coverage areas, including coverage area 41, which overlaps with the first network, encompassed by BSC1 and its respective base transceiver stations and respective coverage areas). See rational previously used for claims 5 and 10 above and note that both BTS11 and BTS21 are in overlapping coverage area 41, where the hard handoff occurs.

In addition, Soliman discloses providing communication for the mobile station at a first carrier frequency in the first wireless network (Fig. 3; reference  $f_1$  in cell 2 of network 84); and providing communication for the mobile station at the first carrier frequency and at a second carrier frequency in the second wireless network (Fig. 3, references  $f_1$  in cell 2 and  $f_2$  in cell 3 of network 86; note that cell 2 also covers a portion of the second wireless network).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to provide communication for the mobile station at a first carrier frequency in the first wireless network and provide communication for the mobile station at the first carrier frequency and at a second carrier frequency in the second wireless network of Johna as suggested by Soliman for the advantages efficiently triggering hard handoff (Soliman: paragraph [0012]) and for successfully performing the corresponding soft and/or hard handoffs.

Regarding claim 17, in the obvious combination, Jolma discloses providing communication for the mobile station at the first carrier frequency in the first wireless network comprising providing communication for the mobile station at the first carrier frequency with the first base transceiver station (Fig. 4; note that as stated above for claim 16, it is inherent that communication is provided at the first carrier frequency in the first wireless network). In addition, see Soliman's Fig. 3.

Regarding claim 18, in the obvious combination, Jolma fails to specifically disclose providing communication for the mobile station at the first carrier frequency in the second wireless network comprising providing communication for the mobile station at the first carrier frequency with the transition base transceiver station.

However, Jolma does suggests providing communication for the mobile station at the first carrier frequency in the second wireless network comprising providing communication for the mobile station at the first carrier frequency with the transition base transceiver station (See rational previously used for claims 5 and 10 above).

In addition, Soliman discloses providing communication for the mobile station at the first carrier frequency in the second wireless network comprising providing communication for the

Art Unit: 2617

mobile station at the first carrier frequency with the transition base transceiver station (Fig. 3; see also rationale previously used for claims 5 and 10 above).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to provide communication for the mobile station at the first carrier frequency in the second wireless network comprising providing communication for the mobile station at the first carrier frequency with the transition base transceiver station of Jolma as suggested by Soliman for the advantages efficiently triggering hard handoff (Soliman: paragraph [0012]) and for successfully performing the corresponding soft and/or hard handoffs.

Regarding claim 19, in the obvious combination, Jolma fails to specifically disclose providing communication for the mobile station at the second carrier frequency in the second wireless network comprising providing communication for the mobile station at the second carrier frequency with the second base transceiver station.

However, Johna does suggests providing communication for the mobile station at the second carrier frequency in the second wireless network comprising providing communication for the mobile station at the second carrier frequency with the second base transceiver station (See rational previously used for claims 5 and 10 above).

In addition, Soliman discloses providing communication for the mobile station at the second carrier frequency in the second wireless network comprising providing communication for the mobile station at the second carrier frequency with the second base transceiver station (Fig. 3; see also rationale previously used for claims 5 and 10 above).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to provide communication for the mobile station at the second carrier

frequency in the second wireless network comprising providing communication for the mobile station at the second carrier frequency with the second base transceiver station of Jolma as suggested by Soliman for the advantages efficiently triggering hard handoff (Soliman: paragraph [0012]) and for successfully performing the corresponding soft and/or hard handoffs.

Page 20

## Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marivelisse Santiago-Cordero whose telephone number is (571) 272-7839. The examiner can normally be reached on Monday through Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

msc 10/31/07

MSC

WILLIAM TROST SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600